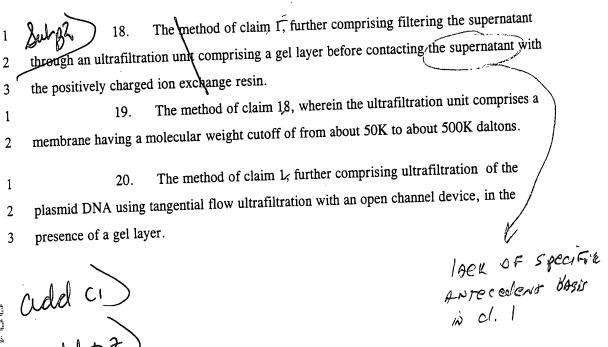
WHAT IS CLAIMED IS: 1 A method for purifying plasmid DNA from bacterial cells, the 2 method comprising the following steps: 3 contacting the cells with a lysis solution, thereby forming a lysis a) 4 mixture; 5 flowing the lysis mixture through a first static mixer to obtain a b) 6 lysed cell solution; contacting the lysed cell solution with a precipitation solution; c) flowing the lysed cell solution and the precipitation solution through d) a second static mixer thereby forming a precipitation mixture; 10 centrifuging the precipitation mixture, thereby forming a pellet and a e) 11 clarified solution comprising the plasmit DNA neutralizing either the precipitate solution or the clarified solution; f) and, contacting the clarified colution with a positively charged ion g) exchange chromatography resin, wherein the plasmid DNA is eluted from the ion exchange chromatography resin with a saline step or continuous gradient; thereby forming **17** a purified plasmid DNA solution. ٦<u>.</u>18 The method of claim 1, further comprising the step of RNase 2. 1 digestion. 2 The method of claim 1, wherein the lysis solution contains alkali. 3. 1 The method of claim 1, wherein the precipitation solution contains 4. 1 potassium acetate. 2 The method of claim 1, wherein the neutralizing step precedes the 5. 1 step of centrifuging the precipitation mixture. 2 The method of claim 1, wherein the linear velocity of the lysis 6. 1 mixture through the first static mixer is between about 0.38 to 2.3 feet per second and the 2 first static mixer has an outer diameter in the range of from about 3/16" inch to about 2 3

inches.

		the first static mixer has 24
1	7.	The method of claim 6, wherein the first static mixer has 24
2	elements.	
	8.	The method of claim 6, wherein the first static mixer is a laminar
1		
2	flow static mixer.	
1	9.	The method of claim 1, wherein the linear velocity of the
2	precipitation mixtu	re through the second static mixer is between 0.38 to 2.3 feet per
3	precipitation mixture through the second static mixer has an outer diameter in the range of from about 3/16 second and the second static mixer has an outer diameter in the range of from about 3/16	
	1 and 2 inches	
4	10.	The method of claim 9, wherein the second static mixer is a laminar
	flow static mixer.	
<u></u>	2 HOW static mixer.	
72 77 77 70 70 70	11.	The method of claim 9, wherein the second static mixer has 24
<u></u>	elements.	
	12	The method of claim 1, wherein steps (a) and (b) are carried out
	simultaneously.	
	13	The method of claim 1, wherein steps (c) and (d) are carried out
M M 2	simultaneously.	
1	Cula 1	The method of claim 1, wherein steps (a), (b), (c), and (d) are
,	carried out simu	ltaneously.
		5. The method of claim 1, wherein steps (a), (b), (c), (d) and (e) are
		ultaneously.
	2 carried out sime	(a) (b) (c) (d) (e) and (f) are
	1	16. The method of claim 1, wherein steps (a), (b), (c), (d) (e) and (f) are
	2 carried out simultaneously.	
	1	17. The method of claim 16, wherein the method is automated.





add ci)